

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) A flow control method for Virtual Container (VC)-Trunks in metropolitan-area network equipment, comprising:

determining, by a receiving-end equipment, whether there is congestion at a single VC-Trunk of a plurality of VC Trunks of a physical port of the receiving-end equipment, if there is congestion at the VC-Trunk, adding a VC-Trunk tag indicating that there is congestion at the VC-Trunk in a flow control packet and sending [[a]]the flow control packet with [[a]]the VC-Trunk tag ~~indicating the VC-Trunk~~ to a transmission-end equipment;

pausing, by the transmission-end equipment, a service transmission of the VC-Trunk according to the VC-Trunk tag in the flow control packet.

2. (Previously Presented) The flow control method according to Claim 1, further comprising: after pausing the service transmission of the VC-Trunk, initiating, by the transmission-end equipment, a flow control timer at the transmission-end equipment; if the flow control timer expires and no new flow control packet is received, resuming, by the transmission-end equipment, the service transmission of the VC-Trunk.

3. (Previously Presented) The flow control method according to Claim 1, further comprising: after sending the flow control packet with the VC-Trunk tag to the transmission-end equipment, initiating, by the receiving-end equipment, a flow control timer at the receiving-end equipment and sending the flow control packet in a timely manner until the congestion disappears.

4. (Previously Presented) The flow control method according to Claim 1, wherein the determining whether there is congestion at the VC-Trunk of the receiving-end equipment comprises, calculating, by the receiving-end equipment, the number of service data packets received at the VC-Trunk; and determining that there is congestion at the VC-Trunk if the number exceeds a preset flow control threshold.

5. (Previously Presented) The flow control method according to Claim 1, wherein the determining whether there is congestion at the VC-Trunk of the receiving-end equipment comprises, determining, by the receiving-end equipment, whether a First In First Out (FIFO) buffer of the VC-Trunk at the receiving-end transmission equipment is overflow, and determining that there is congestion at the VC-Trunk if the FIFO buffer is overflow.

6. (Previously Presented) The flow control method according to Claim 1, wherein the flow control packet comprises an 802.3x pause frame and the VC-Trunk tag as a header to the 802.3x pause frame.

7. (Previously Presented) The flow control method according to Claim 1, wherein VC-Trunk tags correspond to VC-Trunks one by one, and a length of the VC-Trunk tag is determined by the number of VC-Trunks.

8. (Currently Amended) A receiving-end apparatus for flow control of Virtual Container (VC) Trunks, comprising:

a physical port comprising a plurality of VC-Trunks; and

a first unit configured for determining whether there is congestion at a single VC-Trunk of the plurality of VC-Trunks, adding a VC-Trunk tag indicating that there is congestion at the VC-Trunk in a flow control packet and sending out [[a]]the flow control packet with [[a]]the VC-Trunk tag ~~of the VC-Trunk if there is congestion at the VC-Trunk.~~

9. (Previously Presented) The receiving-end apparatus according to claim 8, wherein the first unit is further configured for resuming a service receiving after a time indicated by the flow control packet expires.

10. (Previously Presented) The receiving-end apparatus according to claim 8, further comprising:

a second unit, configured for initiating a flow control timer; and

the first unit is further configured for sending the flow control packet in a timely manner until the congestion disappears.

11. (Previously Presented) The receiving-end apparatus according to claim 8, wherein the first unit comprises a first module configured for calculating the number of service data packets received at the VC-Trunk; and determining that there is congestion at the VC-Trunk if the number exceeds a preset flow control threshold.

12. (Previously Presented) The receiving-end apparatus according to claim 8, wherein the first unit comprises a second module configured for determining whether a First In First Out (FIFO) buffer of the VC-Trunk is overflow, and determining that there is congestion at the VC-Trunk if the FIFO buffer is overflow.

13. (Currently Amended) A transmission-end apparatus for flow control of Virtual Container (VC) Trunks, comprising:

a physical port comprising a plurality of VC-Trunks; and

a first unit configured for receiving a flow control packet containing a VC-Trunk tag indicating that there is congestion at a single VC-Trunk of the plurality of VC-Trunks through the physical port and pausing service transmission of the VC-Trunk according to the VC-Trunk tag.

14. (Previously Presented) The transmission-end apparatus according to claim 13, further comprising:

a second unit configured for initiating a flow control timer after pausing the service transmission of the VC-Trunk, and resuming the service transmission of the VC-Trunk if the flow control timer expires and no new flow control packet is received.

15. (Previously Presented) A system for flow control of Virtual Container (VC) Trunks, comprising:

a receiving-end apparatus configured for determining whether there is congestion at a single VC-Trunk of a plurality of VC-Trunks of a physical port of the receiving-end apparatus, and sending out a flow control packet with a VC-Trunk tag of the VC-Trunk if there is congestion at the VC-Trunk; and

a transmission-end apparatus configured for pausing a service transmission of the VC-Trunk according to the VC-Trunk tag received in the flow control packet.

16. (Previously Presented) The system of claim 15, wherein the receiving-end apparatus is further configured for initiating a flow control timer, and sending the flow control packet to the transmission-end apparatus in a timely manner until the congestion disappears.

17. (Previously Presented) The system of claim 15, wherein the transmission-end apparatus is further configured for initiating a flow control timer after pausing the service transmission of the VC-Trunk, and resuming the service transmission of the VC-Trunk if the flow control timer expires and no new flow control packet is received.

18. (New) The flow control method of claim 1, wherein the flow control packet with the VC-Trunk tag is sent to the transmission-end equipment through anyone of the plurality of VC-Trunks except for the VC-Trunk which has congestion.

19. (New) The receiving-end apparatus of claim 8, wherein the first unit is further configured for sending out the flow control packet with the VC-Trunk tag through anyone of the plurality of VC-Trunks except for the VC-Trunk which has congestion.

20. (New) The transmission-end apparatus of claim 13, wherein the first unit is further configured for receiving the flow control packet through one of the plurality of VC-Trunks except for the VC-Trunk which has congestion.